

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB2004/050279

A. CLASSIFICATION OF SUBJECT MATTER Int. Cl. ⁷ : B82B 3/00 According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DWPI & keywords: nanotechnology; molecular assembly; remote, internet, network, www, wan, lan, web, teleoperate; atom, molecule, energy; and other similar terms. Google: nanotechnology, assembly					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.			
X	EIGLER et al., 'Positioning single atoms with a scanning tunnelling microscope', Nature, 5 April 1990, Volume 344, Pages 524 - 526. Entire article	1,4,5,10,11, 14-16,18-26, 28,31,32			
X	WO 2003/019299 A1 (PHILIPPOU) 6 March 2003 page 1 line 17 - page 5 line 6	1-5,7,8, 10-23,25-32			
X	WO 2001/091855 A1 (NORTHWESTERN UNIVERSITY) 6 December 2001 page 9 lines 8 - 26, page 17 lines 21 - 26, page 27 line 23 - page 29 line 29	1,4,5,10-16, 18-20,22,24, 25,28,31,32			
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex					
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td style="width: 33%; vertical-align: top;"> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family </td> <td style="width: 33%;"></td> </tr> </table>			* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family	
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family				
Date of the actual completion of the international search 7 July 2004		Date of mailing of the international search report 13 JUL 2004			
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C (Continuation).

DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SITTI, 7 October 1998, [online], [retrieved on 22 June 2004]. Retrieved from the internet: <URL: http://dfs.iis.u-tokyo.ac.jp/~shintani/Nano/research.html > Entire article	1,4,5,10-16, 19-26,28,31, 32
X	BOWEN et al., 'Experimental investigation of continuous variable quantum teleportation', Phys Rev A, 10 March 2003, Volume 67. Entire article	1-4,8,9,11, 14-17,19,20, 22,23,25-27- 30
X	'The nanoManipulator: A Virtual-Reality Interface to Scanned-Probe Microscopes' [online], March 2002 [retrieved on 22 June 2004]. Retrieved from the internet: <URL: http://www.cs.unc.edu/Research/ProjectSummaries/nano.pdf > Entire article	1,4,5,10,11, 14-16,19-26, 28,31,32
X	EP 0 702 253 A2 (AT&T CORP) 20 March 1996 column 2 line 47 - column 5 line 56	1-3,7,11, 14- 17,19,20,22, 24-30
X	STERNBACH et al., Star Trek The Next Generation Technical Manual, New York, Pocket Books, 1991. ISBN 0-671-70427-3 pages 90, 91 & 102 - 109	1-5,7-11,13- 17,19-32
X	HATAMURA et al. 'Direct Coupling System between Nanometer World and Human World' in: Proceedings of the IEEE Workshop on Micro Electro Mechanical Systems, New York, IEEE, 1990 pages 203-208	1,4,5,10,11, 14-16,19-23, 25,26,28,31, 32

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/IB2004/050279

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
WO 03019299							
WO 0191855		AU	33440/00	AU	65003/01	CA	2358215
		CA	2411198	EP	1157407	EP	1292361
		US	6635311	US	2002063212	US	2002122873
		US	2003049381	US	2003157254	US	2004028814
		US	2004037959	WO	0041213	WO	03001633
EP 0702253		AU	30139/95	CA	2149559	JP	8069021
		US	5488680				
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.							
END OF ANNEX							